

INTEROFFICE CORRESPONDENCE

DATE July 8, 1991
TO Leon A. Collins, TD, T130C
FROM Celeste M. Marsh, TD, 881 *mm*
SUBJECT Review of Weston Pondcrete Analyses
(Given: volatile component holding times not met due to EG&G operational delays)

As discussed with you approximately two weeks ago, I am providing my comments on the Weston 'Analysis of Inventory Poncrete Final Report'. You had expressed alarm over what appeared to be a factor of 340X discrepancy in the radiochemical data from Teledyne Isotopes and 881 Laboratories. It is not technically correct to compare gross alpha/beta activities to activity data obtained by summing limited radionuclide/isotopic data. Gross alpha/beta provide radioactivity from a wide range of radionuclides of different energies and give an expression of total activity present in the sample. In order to compare 'apples and oranges', you would have needed to analyze for many, many different radionuclides rather than just U-234, U-235, U-238, Am-241, and Pu-239. Incidentally, this report is incomplete. Am-241 data were specified, but no analyses were provided, and no explanation given. Pu-239 data for two samples were not provided, again with no explanation. I find the Teledyne radiochemical report deficient in that absolutely no quality control data appear, and no documentation as to methodology, chain-of-custody or instrumentation are included. Such information was to be provided in the final analytical report but perhaps was overlooked by Weston. The data in the radiochemistry report represent only numbers...

My only other comment was related to the Weston report format in general. Each set of data include a column titled 'Reporting Limit'. Weston should specify if this is an EPA, RCRA, or a Weston Lab internal reporting limit since these values do not necessarily correspond to the current RCRA reporting limits.

cc: D. Ferrier
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S. Jorgensen

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